

Listing of Claims:

Claims 1-6 (Canceled)

7. (New) A work processing method in a machine tool having a main shaft movable in at least a longitudinal direction, the main shaft being at a position on one side, in a horizontally longitudinal direction, of a foundation comprising:

providing a vertical rotation support shaft at a position on the other side of said foundation opposite to said one side,

fixing a lateral stand shaped as a rectangle in plan view and as a right angled triangle in side view on a top portion of said vertical rotation support shaft,

fitting standing support stands of a work grip rotation feed mechanism portion to opposite ends of a slant surface portion of said lateral stand in a longitudinal direction of said lateral stand, said work grip rotation feed mechanism portion rotating a bar-like work due to using the whole surface of said slant surface portion,

horizontally separating a work support axis of said work grip rotation feed mechanism portion and an axis of said vertical rotation support shaft by a required distance to a lower portion of the slant surface portion of the lateral stand, and

varying the position of the lateral stand by rotating the vertical rotation support shaft between a case where the bar-like work is attached to and removed from the work grip rotation feed mechanism portion and a case where the bar-like work is processed by longitudinal displacement of the main shaft.

8. (New) A bar-like work processing method in a machine tool as claimed in claim 7, wherein the axis of the vertical rotation support shaft and the axis of the work grip rotation feed mechanism portion are arranged so that the latter is spaced from the former in a direction toward the main shaft when the lateral stand faces the main shaft.

9. (New) A processing jig for performing a bar-like work processing method in a machine tool claimed in claim 7, wherein the slant surface portion of the lateral stand is inclined from the horizontal by an angle of at least 15 degrees.

10. (New) A support device for work processing in a machine tool having a main shaft movable in at least a longitudinal direction at a position on one side of a foundation in a horizontally longitudinal direction comprising:

a vertical rotation support shaft provided at a position on the other side of said foundation opposite to said one side,

a lateral stand fixed on a top portion of said vertical rotation support shaft, said lateral stand being shaped as a rectangle in plan view and as a right angled triangle in side view,

a work grip rotation feed mechanism portion having standing support stands, said standing support stands being fitted to opposite ends, in a longitudinal direction, of a slant surface portion of the lateral stand, said work grip rotation feed mechanism portion rotating a bar-like work due to using the whole surface of the slant

surface portion, wherein a work support axis of said work grip rotation feed mechanism portion and an axis of said vertical rotation support shaft are horizontally separated by a required distance so that the work support axis is positioned to a lower side of the slant surface portion than the axis of the vertical rotation support shaft, and the position of the lateral stand is varied by rotating the vertical rotation support shaft between a case where the bar-like work is attached to and removed from the work grip rotation feed mechanism portion and a case where the bar-like work is processed by longitudinal displacement of the main shaft.

11. (New) A support device for bar-like work processing as claimed in claim 10, wherein the slanting surface of the lateral stand is inclined from the horizontal by an angle of at least 15 degrees.

12. (New) A support device for bar-like work processing as claimed in claim 10, wherein the lateral stand comprises a horizontal bottom surface portion, a standing surface portion extending from one side of said bottom surface portion, a slanting surface portion connecting a top side of the standing surface portion and the other side of the bottom surface portion, and a space surrounded by the bottom surface portion, the standing surface portion and the slanting surface portion, wherein required members, such as cables and pipes, for the work grip rotation feed mechanism portion are arranged in said space.

13. (New) A processing jig for performing a bar-like work processing method in a machine tool claimed in claim 8, wherein the slant surface portion of the lateral stand is inclined from the horizontal by an angle of at least 15 degrees.

14. (New) A support device for bar-like work processing as claimed in claim 11, wherein the lateral stand comprises a horizontal bottom surface portion, a standing surface portion extending from one side of said bottom surface portion, a slanting surface portion connecting a top side of the standing surface portion and the other side of the bottom surface portion, and a space surrounded by the bottom surface portion, the standing surface portion and the slanting surface portion, wherein required members, such as cables and pipes, for the work grip rotation feed mechanism portion are arranged in said space.